

Steve Castleman

Ex. 6 Personal Privacy (PP)

September 3, 2019

Enrique Manzanilla, Director
Superfund Division
US EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Re: Hunters Point Naval Shipyard (“HPNS”) *Final Five-Year Review (“FYR”)* and
Addendum (“Addendum”)

Dear Director Manzanilla:

As you know, for the past several years I have represented Greenaction concerning the Tetra Tech fraud and its impact on the HPNS cleanup. In that capacity I have submitted multiple written comments to the *Draft Parcel G Work Plan (“Parcel G Plan”)* and the *FYR*. As you may also know, I no longer represent Greenaction. Accordingly, I write in my personal capacity, as a long-time resident of San Francisco and observer of the HPNS cleanup, to urge you to include a number of subjects in EPA’s comments to the *FYR* and *Addendum*.

EPA’s devastating analysis of Tetra Tech’s data, beginning with your December 27, 2017 comments to the Navy’s Parcels B and G data review, was a game changer for which everyone concerned with the shipyard cleanup should be grateful. You subjected the data to the professional scrutiny it required and reported the facts; finding significantly more evidence of fraud and other data problems – about double – than the Navy had. The Navy could not ignore your findings and was forced to discard all the data and start over. It finally had to stop minimizing the extent of the fraud’s impact on the cleanup and address it, a very positive step.

Now EPA is faced with another game changing decision: whether to accept the Navy’s RESRAD and PRG calculations for soil. I urge you to submit the Navy’s cancer-risk data to the same stringent level of scrutiny you applied to the Tetra Tech data review. The public relies on you to assure that the single-most important determination in the cleanup, remedial goals, will truly be protective according to today’s standards.

I urge EPA to address the following issues in comments to the Navy.

I. PRGs and RESRAD

A. EPA Should Release Its Independent PRG Calculations

To the extent there is an “ordinary” Superfund site, HPNS is not it. No other CERCLA cleanup has been the victim of the massive, multi-pronged fraud committed under the direction of Tetra Tech supervisors and its top two onsite executives, the Project Manager and Construction Superintendent. No other site will require retesting more than a decade of work. No other CERCLA cleanup has wasted hundreds of millions of dollars.

Furthermore, there is intense public concern about the cleanup in the wake of the fraud and many have lost all faith in the Navy’s intention to do a proper cleanup and its competence to carry it out.

Extraordinary circumstances require an extraordinary response. Given the history of the fraud, the Navy’s complicity in it, its long record of misleading the public and thumbing its nose at CERCLA and the EPA, the appropriate response is to invoke Section 2.5 of the EPA’s 2001 *Comprehensive Five-Year Guidance*. It states that “EPA will either concur with the other federal agency or department protectiveness determination, or EPA may make an independent finding.” I urge you to exercise your authority and make an independent finding on protectiveness.

You should follow the same approach in your comments to the *Addendum* that you did in the data review. EPA should publish its independent PRG calculations for soil so the public does not have to rely on Navy data alone. You should also request that the Navy extend the public comment period until 30 days after EPA releases its PRG calculations. If the Navy refuses, EPA should provide an informal comment period of 30 days by deferring approval of the *FYR* and its *Addendum* until 30 days after releasing your independent PRG results.

By publishing its calculations, EPA will greatly improve public understanding and trust, just as your review of Tetra Tech’s data did. Most people weren’t in a position to understand the details of the statistical tests entailed in the data review. But they could easily grasp the summary, which boiled the results down to percentages of samples. Similarly, most people may not have the technical knowledge to parse the calculations on which the PRGs are based. But they could successfully compare EPA’s data side-by-side with the Navy’s as both will report results in the same format; people can thereby compare “apples with apples.”

Because of the extraordinary public distrust of the Navy, I also urge you to go beyond normal practice and insist that the Navy provide a detailed description of the assumptions made in its protectiveness calculations, in plain English understandable to a public ill-equipped to evaluate the technical language in the *Addendum*. I urge EPA to follow suit.

The Navy must explain why it has gone to such great lengths to stonewall EPA and the public on the PRGs for so long. Based on the Navy’s actions, it is reasonable to infer the Navy knew it could not validate the old Parcel G RGs and was casting around for some way to do so. Ultimately, it appears, the Navy had no choice but to comply with EPA’s demands. You should ask the Navy to offer an alternative explanation if there is one.

Unfortunately, the Navy continues to prove it is untrustworthy by peddling a false story about the sequence of events. The fact sheet accompanying the *Addendum, RESRAD Explained*,¹ states “RESRAD is the primary measurement tool used” by the Navy. It also says, “The Navy is working with the EPA on using the PRG Calculator to complement the RESRAD tool.” (Emphasis added.)

This “fact” sheet crosses the line separating spin from misrepresentation. The Navy cannot be allowed to deny stonewalling EPA for more than a year. Nor can it characterize the PRG calculator as a “compliment” to RESRAD when it was intended to entirely supplant it.

EPA should require that the Navy correct these statements to reflect an accurate chronology. And, if RESRAD is the Navy’s “primary measurement tool,” the Navy should explain why RESRAD was not mentioned even once in any previous Navy documents, only surfacing when it tried to unilaterally substitute RESRAD for the PRGs.

B. The Acceptable Risk Range

EPA published *Radiation Risk Assessment at CERCLA Sites: Q & A* in 2014, updating the previous 1999 version. It repeatedly and consistently describes the allowable cancer risk range. For example, in Answer 34 the guidance states:

Consistent with existing Agency guidance for the CERCLA remedial program, while the upper end of the risk range is not a discrete line at 1×10^{-4} , EPA generally uses 1×10^{-4} in making risk management decisions. A specific risk estimate around 10^{-4} may be considered acceptable based on site-specific circumstances.

In other words, while there is no upper end “red line” at 1×10^{-4} , “EPA generally uses” that standard when “making risk management decision[s].” A slightly lesser standard may be considered but only if warranted by site-specific conditions and only if the responsible party obtains EPA’s approval.

The Navy released its RESRAD and PRG calculations for soil on August 8, 2019. In Table 2 of the *Addendum*, “RESRAD Evaluation of Radiological Remedial Goals,” the Navy reports that the total risk for radium, a major ROC at the shipyard, exceeded 1×10^{-4} , quantifying the risk to be 1.2×10^{-4} . It also found the thorium risk to be 2.7×10^{-4} , approaching 3 cancers per 10,000. The Navy’s PRG calculations reported thorium exceeded 1×10^{-4} as well.

The *Addendum*, however, contains no evidence that the Navy either sought any relaxation of the 1×10^{-4} standard or stated any site-specific reasons for deviating from what is “generally use[d].”

At the August 26, 2019 meeting of the Hunters Point Shipyard Citizens’ Advisory Committee (“CAC”), which some of your staff attended, I asked Dr. Craig Bias, a Navy contractor, how the

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https://www.bracpmo.navy.mil/brac_bases/california/former_shipyard_hunters_point/public_notices/public_notice_soil_evaluation0.html

Addendum could claim RESRAD validated the protectiveness of the current RGs when radionuclides exceeded 1×10^{-4} . He responded that there was a range of acceptable risk, adding, “ 9.9×10^{-4} is still in the risk range of 10^{-6} to 10^{-4} . You are making an assumption, and I understand where it comes from, that 10^{-4} implies 1×10^{-4} . But that’s not the range.” Derek Robinson, the Navy’s lead in the HPNS cleanup, seconded Dr. Bias’s statement that 9.9 cancers per 10,000 was within the acceptable risk range.²

Based on my discussions with EPA staff, however, it is my understanding EPA will sometimes relax the standard to 2×10^{-4} but rarely allows 3×10^{-4} . The range cited by Dr. Bias and Mr. Robinson, just shy of 10 in 10,000, is much closer to 1×10^{-3} than 1×10^{-4} and is not authorized by EPA guidances or practice.

EPA should enforce the 1×10^{-4} standard until the Navy establishes good cause for relaxing the threshold based on factors specific to HPNS.

Finally, while those with a background in science may understand the nuances of scientific notation, the general public does not. The distinction between 10^{-4} and 1×10^{-4} is not a matter of common knowledge. The Navy should report cancer risk results in plain English understandable to the general public. So should EPA.

II. Other *Final FYR* Issues

A. Parcel D-1 Sewers, Storm Drains and Associated Soils Must be Included in the Retesting

The Navy publicly promised to retest all Tetra Tech’s work. Why then does the *Final FYR* exclude some of Tetra Tech’s work from retesting?

The *Final FYR* contends decontamination of all Parcel D-1 sewers was successfully completed:

Radiological remediation was performed in two phases. Phase I, completed in 2014, included radiological remediation and surveys of the northern portion of Parcel D-1, including Gun Mole Pier, South Pier, Buildings 274 and 383, former building sites 313/313A/322, and a portion of the storm drain and sanitary sewer system. Phase I included removal of 18,320 cubic yards of soil from 12,957 linear feet of sanitary sewer and storm drain lines (Shaw Environmental & Infrastructure, Inc., 2014a). Phase II included radiological remediation and surveys of the remainder of Parcel D-1 (i.e., the southern portion of Parcel D-1) (Gilbane Federal, 2018a). p. 3-20.

But the Navy has known since 2010 that the 18,320 cubic yards of soil in Shaw Environmental’s Parcel D-1 sewer project was scanned by Tetra Tech at the very same Radiological Survey Yard where Tetra Tech’s fraudulent scanning occurred. Shaw and Tetra Tech entered into a written MOU, which the Navy approved, transferring the D-1 soil to Tetra Tech for screening and then returning clean soil to Shaw for use as backfill.

² Video of August 26, 2019 CAC meeting at approximately 35:44 Bias

It was not until attorneys for Greenaction uncovered Tetra Tech's involvement in Shaw's sewer project that EPA, other regulators and the public became aware for the first time that the impact of Tetra Tech's fraud extends to work done by other contractors. To this day the Navy has never admitted it.

EPA must ensure the Navy will retest, and if necessary re-remediate, all soil from Shaw's excavation of Parcel D-1's sewers and from other contractors Tetra Tech did scanning for, if any.

B. The Navy Continues to Try to Weaken Parcel G Soil RGs by Adding Background, Violating the ROD

Perhaps the most egregious misrepresentation in the *Parcel G Plan* is the Navy's claim that it intends to adhere to the RGs in the Parcel G ROD. However, as addressed in Greenaction's August 14, 2018 comments, the Navy actually intends to weaken the remedial goals.

The ROD states the RG for each radionuclide without any qualification. There is one exception, however, for radium-²²⁶, which allows for adding background levels to the established RG. But the *Parcel G Plan* improperly applies the radium exception to all other ROCs. This is made crystal clear in Table 3-2, which lists Residential Soil Remediation Goals. Footnote "a" states, "All RGs will be applied as concentrations above background." (Emphasis added.)

Neither the Table nor the footnote reference any justification for this fundamental change.

During the August 26, 2019 CAC meeting, I asked Mr. Robinson what authorized the Navy to apply the radium exception to the other ROCs. He replied:

The particular language you're talking about had to do with a lot of different deliberations with EPA on radium and it was very specific in that table, that that's above background. However, that's how we do the CERCLA program, all of our remedial goals are above background. That's how the PRG calculator is set up. That's how RESRAD's set up. So just because it didn't say it for others doesn't mean that that's not how we approach remedial goals. So I understand the confusion, because it specifically states the radium is above background, but that's how all of them, they all have to be above background. The stuff that's in the soil, we're not remediating below background that's actually in the soil, we're remediating above what's naturally occurring in the soil.³ (Emphasis added.)

Of course no one is required to clean up to levels below background. That is a preposterous reading of our comment. The point was that the ROD only allows adding background to the remedial goal for radium. Every other ROC excludes background. The way to change RGs is by amending the ROD, which has not been done.

The Navy was required to respond when Greenaction raised this issue in its August 14, 2018 comments. 40 C.F.R. Section 300.815(b) states, "A written response to significant comments submitted during the public comment period shall be included in the administrative record file."

³ Video of August 26, 2019 CAC meeting at approximately 1:52:49. <https://www.facebook.com/hpscac>.

(Emphasis added.) The Navy's failure to respond to significant, detailed comments by Greenaction and the Committee to Bridge the Gap blatantly violated this obligation.

Finally, if it is the case that the Navy routinely adds background to RGs for ROCs other than radium, as Mr. Robinson seems to suggest, it has seriously misled the public about what the true RGs for radionuclides at HPNS are. EPA should require the Navy to clarify and explain.

C. Parcel A Must Be Investigated

The *Final FYR* barely mentions Parcel A:

Records of Decision (RODs) have been completed for all parcels except Parcel F. This fourth five-year review focuses on the parcels (specifically, B-1, B-2, C, D-1, D-2, E, E-2, G, UC-1, UC-2, and UC-3) where remedial actions (RAs) have been completed or are under way, including parcels that transferred out of Navy ownership within the last 5 years, and includes summary status information for all parcels, except former Parcel A. Parcel A is not discussed in this report because the parcel required no action under CERCLA.⁴

Why does the Navy acknowledge responsibility for parcels transferred to the city only "within the last five years"? There is no justification, but its effect is clear; to specifically exclude Parcel A. The Navy continues to advance the fiction that Parcel A was never radiologically impacted despite uncontroverted evidence to the contrary.

As you know, samples taken from the old Parcel A sewer systems found elevated radiation which should have been investigated but was not. Witnesses suggest the pipes were disposed of offsite, possibly illegally, and the associated soil was pushed down one of the parcel's slopes in preparation for grading the area prior to development. EPA should insist that the fate of the sewer pipes and related soil be investigated.

In addition, a radioactive deck marker was found close to the surface of Parcel A, near inhabited apartments, during the California Department of Public Health's Parcel A scanning. This, despite the Navy's categorical denial – for decades – that Parcel A could have been impacted. The Navy's response to the deck marker finding was essentially a shrug and an assumption, lacking any factual basis, that there couldn't possibly be additional deck markers or other contamination present; precisely what the Navy claimed before the deck marker was discovered.

EPA should not buy into the Navy's illogical and unsupportable assumption that the Parcel A scanning miraculously chanced upon the one and only radioactively impacted area. The Navy must investigate by conducting comprehensive soil sampling.

The Navy cannot wash its hands of Parcel A. Further characterization of the old sewer systems and related soil was the Navy's responsibility before the transfer and it still bears that responsibility.

⁴ *Final FYR*, Executive Summary, p. 1.

D. The *FYR* is Significantly Late; What Justifies the Delay?

The *FYR* was supposed to be finalized by November 2018. Ten months later there is still no end in sight. Yet, the Navy appears to be in no rush. The *Final FYR* states:

In addition, the Navy is in the process of conducting a long-term protectiveness evaluation of the ROD radiological RGs. After finalization of the Five-Year Review, the Navy will issue a draft addendum evaluating the long-term protectiveness of the RGs for soil using RESRAD and the EPA's Preliminary Remediation Goal (PRG) Calculator for radiation risk to human health. Another draft addendum evaluating the longterm protectiveness of the RGs for buildings (for both residential and commercial/industrial scenarios) will also be issued. The draft addenda will include explanations of the proposed site-specific inputs and will be issued to the public and regulatory agencies for a 30-day review and comment period. The Navy will prepare responses to regulatory agency comments and a responsiveness summary to comments from the public. The results of the final evaluations will inform the retesting sensitivity and cleanup thresholds. These risk evaluations may also inform future risk management decisions and the potential for post-ROD changes, if appropriate. It is anticipated that the radiological rework will be completed prior to the next Five-Year Review. p. 7-3.

The Navy must explain why it failed to meet a deadline it had five years to prepare for and when it expects the *FYR* to be truly final.

In addition to omitting any explanation for the Navy's blown deadlines, it continues to cling to an unrealistic timetable. When the *Final FYR* predicts that all radiological rework will be done in five years, that means the Navy claims it can redo what took Tetra Tech more than ten years to do in half that time. EPA should require the Navy to make realistic projections.

III. Conclusion

The lateness of the *FYR* – it is more correctly described as a *Six Year Review* – illustrates the Navy's disregard for the law. Among other things, the Navy disregarded EPA's right to its PRG data. It sought to intentionally prevent public comment on protectiveness (and got away with it until EPA apparently insisted otherwise). It failed to respond to significant comments as CERCLA requires. It plans to violate the Parcel G ROD by improperly

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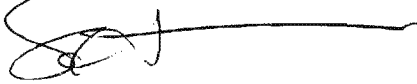
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adding background to the RGs, significantly weakening them.

EPA must insist that the Navy comply with CERCLA, particularly when it comes to the central issue of estimating excess cancer risk.

Thank you very much for your attention to these matters. Please contact me if you need any further information.

Sincerely,

A handwritten signature in black ink, appearing to be 'Steve Castleman', with a long horizontal line extending to the right.

Steve Castleman